

Date: Tue, 19 Apr 94 12:46:05 PDT  
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>  
Errors-To: Ham-Space-Errors@UCSD.Edu  
Reply-To: Ham-Space@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Space Digest V94 #99  
To: Ham-Space

Ham-Space Digest                      Tue, 19 Apr 94                      Volume 94 : Issue    99

Today's Topics:

                    \* SpaceNews 18-Apr-94 \*  
                    On-line satellite schedules?  
                    Two-Line Orbital Element Set: Space Shuttle (2 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>  
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
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Date: Mon, 18 Apr 1994 10:02:16 MDT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!  
MathWorks.Com!panix!zip.eecs.umich.edu!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!  
alberta!ve6mgs!usenet@network.ucsd.edu  
Subject: \* SpaceNews 18-Apr-94 \*  
To: ham-space@ucsd.edu

SB NEWS @ AMSAT \$SPC0418  
\* SpaceNews 18-Apr-94 \*

BID: \$SPC0418

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SpaceNews  
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MONDAY APRIL 18, 1994

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited distribution.

\* STS-59 SAREX NEWS \*

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The following are some packet frames received from the Space Shuttle Endeavour by Andy, WA5ZIB:

W5RRR-1>SAREX [04/12/94 10:13:38] <UI>:  
This is STS-59 SAREX Robot station W5RRR-1  
onboard the Space Shuttle Endeavour.

W5RRR-1>QST [04/12/94 10:14:01] <I S4 R0>:  
Thanks to all of you hams who have connected to our packet station and worked us on voice! It really makes us feel closely connected to the people and places that we are flying over. On board Endeavour things are working very well - the scientists are very happy with the data they are acquiring. I am very happy to be back in space, and it all feels very familiar and nice. Our crew has been very well trained, and we were able to accomplish all our tasks as scheduled so far. We have had some spectacular views of Earth - we just flew over Tahiti, for example.

73, N5QWL  
12 April 1994 02:20 UTC

QSLs are available through the ARRL at the following address:

ARRL  
ATTN: STS-59 QSLs  
225 Main Street  
Newington, CT 06111  
USA

Include a self-addressed stamped envelope (SASE) with your QSL. Non-US stations should include a self addressed envelope with \$0.50 of US postage affixed or appropriate IRCs. Include the callsign worked, date, UTC, mode, and frequency. For packet contacts, include the QSO number issued by the Robot. SWL QSLs: Include the callsign heard, date, UTC, mode, and frequency.

\* SOLAR ECLIPSE INFORMATION \*

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On 1994 May 10 (Tue), an annular solar eclipse will be visible throughout

North and Central America. The May issue of "Sky & Telescope" (p 72ff) details this event, the last of its type visible in the continental US until 2012 May 20.

Scott, KF9QK, plans to monitor 10-meter beacons for the effect of the eclipse on radio propagation. Of interest is a predicted 'bow shock' effect on ionospheric propagation as the annular eclipse proceeds, so amateurs should plan observations well ahead and after their astronomical eyeball brethren. Observations of any effect on V/UHF propagation are also of interest. A log of conditions before, during and after the event would be most helpful. "Sky & Telescope" provides the needed planning information. Radio observers, of course, need not worry about atmospheric conditions.

Weather-wise, observers can also expect noticeable shifts in temperature, pressure and wind during the annular eclipse. An observer in Indiana has requested such information, which, if forwarded to KF9QK, will be relayed. Again, the better the log, the more it's worth.

Scott may be reached via packet radio at: KF9QK @ N9HSI.IL.USA.NOAM

[Info via KF9QK]

★ AMSAT PBBS MOVE ★

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The AMSAT PBBS changed frequency and modes on April 15th at 1600 UTC. The AMSAT PBBS will be on a Mark frequency of 14.079 MHz, (that's 14.1811 MHz AFSK LSB), using Pactor with the callsign WT0N. The new schedule will be as follows: Monday through Saturday from 1600 UTC until 2300 UTC on a Mark frequency of 14.079 MHz. From 2330 UTC until 0400 UTC on a Mark frequency of 7.0735 MHz (that's 7.0756 MHz AFSK LSB), using Pactor. These changes have been made to better serve AMSAT users with greater coverage and use of a mode that many of the users have expressed an interest in. If anyone would like to use the Mode G-TOR, please let WT0N know and he will see about setting up a schedule for G-TOR users. Please send any comments or suggestions to one of the following:

INTERNET: BJARTS@STTHOMAS.EDU

PACKET: WT0N@WB0GDB.#STP.MN.USA.NOAM

PACTOR: WT0N

The AMSAT PBBS will have updated Keps and AMSAT bulletins, along with SpaceNews and other satellite related items.

[Info via BJ Arts, WT0N]

\* JOHNSON SPACE CENTER BBS INFORMATION \*

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The Johnson Space Center Amateur Radio Club has set up a telephone computer bulletin board (BBS). The purpose of the BBS is to provide a source of current Space Shuttle mission Keplerian Elements.

There are limited number of BBS files available for downloading.

Among the current files are:

- o Current and old element sets for the mission in progress
- o Current mission information
- o Shuttle Amateur Radio Experiment (SAREX) information
- o Recent Space Shuttle Mission Schedules and Manifests
- o Astronaut/Cosmonaut Ham List
- o Current JSC Amateur Radio Club Newsletter

We ask that no files be uploaded to the BBS.

The telephone number is (713) 244-5625. The speed is anything up to 9600 baud. The parameters are N-8-1.

The BBS is currently running in ProComm HOST mode, so the log on is very simple and downloading is easy.

After logging in you will see the Welcome Screen describing the BBS. Also, the Welcome Screen contains the current and latest element set number (e.g., JSC008) loaded on the BBS. Check it against your last set so you won't waste your time duplicating a set you already have.

Press ENTER to bring up the second page containing the current Space Shuttle Keplerian Element Set. If you have a file capture or screen capture function in your communications software, use it for this page. That way, you won't have to go through the file download process if all you wanted was the latest element set.

If you have any comments for the Club or BBS sysop, leave a message and the sysops will respond.

Dale Martin, KG5U @ KA5KTH.#SETX.TX.USA.NA  
Secretary, Johnson Space Center ARC  
Houston, Texas

\* AMATEUR SPACE SHOT \*

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With funding from the National Space Society, the Pacific Rocket Society (PRS) is building a nitric acid/furfuryl alcohol rocket designed to achieve an altitude of 80 kilometers--the edge of space.

Of interest to the AMSAT folks is the television and data telemetry payload designed and built by Duncan Cumming, KD6GKE. (Duncan is a native of Birmingham England and holds a PhD in Electrical Engineering from Cambridge University.) The system transmits video from a small security camera at 434 MHz and data at 145.75 MHz.

The data channels include GPS, magnetometer, accelerometer, altimeter, launch detector, engine temperatures and pressures and status switches. The heart of the system is a Tattletale IV single board 6303 based computer.

An article on Duncan's telemetry system, co-authored by George Morgan, WB6ZUV, appears in the April 1994 issue of "High Power Rocketry."

The launch will be from the Pacific Rocket Society test site in the Mojave Desert later this year.

The PRS meets monthly in the physics classroom of Chaminade College Preparatory, West Hills, California. Inquiries about the project can be sent to PRS president Charles Pooley, KD6HKU at ckp@netcom.com or to Dave Reeves at kf6pj@amsat.org or chaminade@amsat.org.

[Info via Dave Reeves, KF6PJ/WA6BYE]

★ F0-20 SCHEDULE ★

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The F0-20 command station announced that F0-20 will be placed in Mode JA (Analog transponder mode) during Field Day 1994 (25-Jun-94 18:00 UTC through 26-Jun-94 18:00 UTC).

The current operating schedule is as follows:

Analog mode:

20-Apr-94 07:35 -to- 27-Apr-94 07:55 UTC

11-May-94 06:54 -to- 18-May-94 07:20 UTC

Digital mode:

Unless otherwise noted above.

[Info via Kazu Sakamoto, JJ1WTK]

★ THANKS! ★

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Thanks to all those who sent messages of appreciation to SpaceNews, especially:

N9QKD

WT0N

and Bob, N7PTM, who uploads SpaceNews to the GENie telephone BBS system. Bob places SpaceNews in the Radio and Electronics section, and is told it is available in the Space section as well.

★ FEEDBACK/INPUT WELCOMED ★

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Mail to SpaceNews should be directed to the editor (John, KD2BD) via any of the following paths:

FAX : 1-908-747-7107

PACKET : KD2BD @ N2KZH.NJ.USA.NA

INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD  
Department of Engineering and Technology  
Advanced Technology Center  
Brookdale Community College  
Lincroft, New Jersey 07738  
U.S.A.

<<= SpaceNews: The first amateur newsletter read in space! -=>>

/EX

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John A. Magliacane, KD2BD \* /\ \* Voice : 1-908-224-2948  
Advanced Technology Center |/\| Packet : KD2BD @ N2KZH.NJ.USA.NA  
Brookdale Community College |/\| Internet: kd2bd@ka2qhd.ocpt.ccur.com  
Lincroft, NJ 07738 \* /\ \* Morse : -. -.. ..--- .... -..

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Date: Mon, 18 Apr 1994 13:34:48 -0400

From: ncar!asuvax!pitstop.mcd.mot.com!mcdphx!schbbs!mothost!lmpsbbs!NewsWatcher!  
user@ames.arpa

Subject: On-line satellite schedules?

To: ham-space@ucsd.edu

In article <CnEEwy.Kpy@freenet.carleton.ca>, ag381@FreeNet.Carleton.CA  
(Herb Dieben) wrote:

>

>

> In a previous article, awoodhull@hamp.hampshire.edu () says:

>  
> >Is there an on-line source of data about Oscar and RS satellite schedules  
> >of operation?  
> >  
> > Albert S. Woodhull  
> > Hampshire College, Amherst, MA, USA  
> > awoodhull@hamp.hampshire.edu  
> >  
> Let me know if you find one.  
> Thanks,Herb  
> >

You are both in the right place. The orbital data appears here regularly,  
and  
is usually titled \$ORBnnn.type, where the "nnn" is a sequentially assigned  
number and the "type" may be weather (WX), amateur (OSCAR) or other fairly  
easily decoded suffix. You may also see the title containing the word  
"KEPS,"  
short for Keplerian orbital data.

Recently several folks have been posting their own original works or  
duplicates of the ARRL and AMSAT listings into the rec.radio.amateur.misc  
newsgroup, which is strongly discouraged. Keep looking here, you'll find  
much valuable news here, including SpaceNews, the AMSAT bulletins, and  
other  
helpful info.

--  
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >  
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

The statements and opinions expressed here are not those of Motorola Inc.  
Motorola paid a marketing firm a huge sum of money to get their opinions;  
they have made it clear that they do not wish to share those of employees.

Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

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Date: Mon, 18 Apr 1994 22:42:45 MDT  
From: ihnp4.ucsd.edu!swrinda!gatech!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!  
ve6mgs!usenet@network.ucsd.edu  
Subject: Two-Line Orbital Element Set: Space Shuttle  
To: ham-space@ucsd.edu

The most current orbital elements from the NORAD two-line element sets are  
carried on the Celestial BBS, (513) \*253-9767\*, and are updated daily (when  
possible). Documentation and tracking software are also available on this

system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below. The Celestial BBS may be accessed 24 hours/day at 300, 1200, 2400, 4800, or 9600 bps using 8 data bits, 1 stop bit, no parity.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

STS 59

```
1 23042U 94020A 94107.91666667 .00025849 11135-4 10898-4 0 314
2 23042 56.9922 223.0523 0007875 294.2887 134.4999 16.23816294 1372
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Dr TS Kelso  
tkelso@afit.af.mil

Assistant Professor of Space Operations  
Air Force Institute of Technology

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Date: Tue, 19 Apr 1994 04:42:29 GMT

From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!

europa.eng.gtefsd.com!paladin.american.edu!zombie.ncsc.mil!blackbird.afit.af.mil!  
tkelso@network.ucsd.edu

Subject: Two-Line Orbital Element Set: Space Shuttle

To: ham-space@ucsd.edu

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial BBS, (513) \*253-9767\*, and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below. The Celestial BBS may be accessed 24 hours/day at 300, 1200, 2400, 4800, or 9600 bps using 8 data bits, 1 stop bit, no parity.

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STS 59

```
1 23042U 94020A 94107.91666667 .00025849 11135-4 10898-4 0 314
2 23042 56.9922 223.0523 0007875 294.2887 134.4999 16.23816294 1372
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Dr TS Kelso  
tkelso@afit.af.mil

Assistant Professor of Space Operations  
Air Force Institute of Technology

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End of Ham-Space Digest V94 #99

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